Northwestern Engineering

The Transportation Center

Transportation Center Seminar......

"WHAT CAN CHOICE MODELLING LEARN FROM BEHAVIOURAL ECONOMICS AND DOES IT MATTER?"

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Thursday –Jan 8, 2015 4:00 - 5:00 pm Location:

> Transportation Center Chambers Hall 600 Foster, Evanston Lower level

Abstract: Mathematical models of choice behaviour are used to understand people's choices across a range of topic areas, with transport being one of the most active fields. Their outputs form a key component in guidance underpinning government and industry decisions on changes to policy, infrastructure developments or the introduction of new services or products. In recent years, there has been a growing trend to seek to improve the behavioural realism of the models, often through bringing in ideas from behavioural economics and mathematical psychology. This presentations gives an overview of a number of key concepts in this area, showing the extent to which existing data supports the notion that the assumption of purely compensatory (and often linear in preferences) decision making is not representative of real world behaviour. The talk then focusses on whether (and how much) this matters for choice modelling research and real world transport planning, and identifies some key priorities for future developments.

Bio: Stephane Hess is Professor of Choice Modelling in the Institute for Transport Studies at the University of Leeds. He is also Honorary Professor in Choice Modelling in the Institute for Transport and Logistics Studies at the University of Sydney, and affiliated Professor in Demand Analysis at KTH Royal Institute of Technology in Stockholm.

His main research interests lie in the use of advanced discrete choice models for the analysis of travel behaviour, primarily with the use of stated preference data. Here, Hess has made contributions to the state of the art in the specification, estimation and interpretation of such models, notably in a valuation of travel time savings context, while also publishing widely on the benefits of advanced structures in actual large-scale transport analyses.

His contributions have been recognised for example by the 2014 Outstanding Young Member of the Transportation Research Board (TRB) award for exceptional achievements in transportation research, policy, the 2010 Fred Burggraf award handed out by the Transportation Research Board, the 2005 Eric Pas award for the best PhD thesis in the area of travel behaviour modelling, and the 2004 Neil Mansfield award handed out by the Association for European Transport. He is also the founding editor in chief of the Journal of Choice Modelling, the founder and steering committee chair of the International Choice Modelling Conference, and the co-chair for the 14th International Conference on Travel Behaviour Research, to be held in London in 2015.